

with the Aleutian Low (1001 mb) shifting to near south-eastern Kamchatka.

WINDS north of 55°N blow mostly from a northerly direction at force 4 to 6, except over the Gulf of Alaska where force 4 easterlies prevail. Westerly winds of force 3 to 6 are usually felt south of 55°N to about 40°N over the extreme eastern ocean, 35°N over the central-eastern and midocean, and 30°N west of 165°E and east of Japan. Nevertheless, winds over the southwestern Bering Sea show a tendency to be variable, and off the coast of British Columbia the prevailing wind is southerly. Steady "northeast trades" prevail (force 4) between 25°N and the Equator, except they extend to nearly 35°N off the southwestern California coast. These trade winds merge with the force 4 to 5 winds of the northeast winter monsoon near 140°E. Variable winds (force 3 to 4) lie in a narrow belt between the aforementioned westerlies and northeasterlies. Prevailing winds are largely from the north or northwest and average about force 4 over the Sea of Japan, and the Yellow Sea, and along the southeast coast of Japan. Northerly winds blow steadily out from the Gulf of Tehuantepec, off the south coast of Mexico.

GALES. A larger area of the North Pacific is subject to gales during December than in the preceding month. North of about 39°N over eastern and central waters and 32°N over western waters, 10 percent of the observations contain winds of force 8 or higher. The greatest frequencies, 20 to about 25 percent, occur in three scattered areas from the waters south of the southern tip of the Kamchatka Peninsula south-southeastward to about 34°N, 166°E. Farther north, the frequency of gales decreases to less than 10 percent over the Sea of Okhotsk and the Bering Sea. They are also under 10 percent across a triangularly shaped area southeast of the Aleutians bounded at 53°N, 162°W; 47°N, 163°W; and 49°N, 174°W. Gales are recorded between 5 and 10 percent of the time on the waters surrounding Taiwan, the southern Ryukyus, and the northern portion of Luzon as far east as 144°E, because of the strong development of the northeast monsoon. Gale-force northerly winds occur between 5 and 10 percent of the time out from the Gulf of Tehuantepec.

EXTRATROPICAL CYCLONES. Primary storm tracks extend from the northern portion of the Sea of Japan and the waters east of the Ryukyus to the ocean region lying between Kamchatka and the western Aleutians. From there, LOWS either pass near the Pribilof Islands or continue east-northeastward to the Gulf of Alaska. Another major storm track reaches the Gulf of Alaska from an area south of the Alaska Peninsula near 48°N. The only other primary cyclone track swings toward Vancouver Island from a point 450 mi west of the Oregon coast.

TROPICAL CYCLONES. One tropical storm usually develops over the western North Pacific during December. About two out of every three that do pop up go on to become typhoons. The most likely area of formation is in the neighborhood of the Caroline Islands. Contrary to the events of November, very few of these storms are able to maintain their identity over the South China Sea after traversing the Philippines.

Off the Mexican west coast, tropical cyclones are rare in December.

SEA HEIGHTS of at least 12 ft occur 10 percent or more of the time north of approximately 35°N, east of 150°E, and south of the Alaska mainland, the Aleutian Islands, Kamchatka, and 55°N on the Sea of Okhotsk.

VISIBILITY under 2 mi occurs 10 percent or more of the time north of a line drawn from the lower Tatar Strait to the central Kurils and then northeastward to the western Aleutians where it dips southeastward to about 47°N, 177°W. Upon reaching a point near 47°N, 165°W, the line bends generally northward to Cape Romanzof, Alaska. A much smaller area of 10-percent frequency is centered near 44°N, 143°W. Visibility less than 2 mi encompasses more than 20 percent of all observations poleward of a line cutting through the northern and eastern portions of the Sea of Okhotsk, the northern Kurils, and then northeastward through the Bering Sea to the Bering Strait (passing west of both the Komandorskiye Islands and St. Lawrence Island). A smaller area comprising a 20 percent or greater frequency lies north of the central Aleutians near 54°N, 173°W.

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